



# CMN86

**6.8" 2 DIN CAPACITIVE TOUCH SCREEN  
MULTIMEDIA MECHLESS RECEIVER**

**AM-FM-RDS with Navigation  
USB Multimedia Player  
Front / Rear Camera Inputs**

## INSTALLATION & OWNER'S MANUAL



# JENSEN®

### ***FCC Compliance***

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This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

**Warning:** Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### ***Copyright and Trademark***

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The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc.

Other trademarks and trade names are those of their respective owners.

*Video / movie playback will not operate while the vehicle is moving. This is a safety feature to prevent driver distraction. In-dash video / movie functions will only operate when vehicle is in Park and the parking brake is engaged. It is illegal in most jurisdictions for the driver to view video while the vehicle is in motion.*



The **SAFETY NOTICE** is reminder to drive responsibly and safely while using your mobile phone device, or any APP's that are compatible with this unit.

it is highly recommended that your JENSEN CMN86 is installed by a professional installer or an authorized dealer.

This product is only for use in vehicles with 12VDC negative ground only.

#### To prevent damage or injury:

- Make sure to ground the unit securely to the vehicle chassis ground.
- Do not remove the top or bottom covers of the unit.
- Do not install the unit in a spot exposed to direct sunlight or excessive heat or the possibility of water splashing.
- Do not subject the unit to excessive shock.
- When replacing a fuse, only use a new one with the correct rating. Using a fuse with the wrong rating may cause the unit to malfunction.
- To prevent short circuits when replacing a fuse, disconnect the wiring harness first.
- Use only the provided hardware and wire harness.
- If you experience problems during installation, consult your nearest JENSEN dealer.
- If the unit malfunctions, reset the unit as described. If the problem still persists, consult your nearest JENSEN dealer or call tech assistance @ 1-888-921-4088.
- To clean the monitor, wipe only with a dry silicone cloth or soft cloth. Do not use a stiff cloth, or solvents such as paint thinner and alcohol. They can scratch the surface of the panel and/or remove the printing.
- When the temperature of the unit falls (as in winter), the liquid crystal inside the screen will become darker than usual. Normal brightness will return after the unit is in use for a while.
- When extending the ignition, battery or ground wiring, make sure to use automotive-grade wiring with an a minimum AWG 16 or more to prevent voltage drops.
- Do not touch the liquid crystal fluid if the LCD is damaged or broken. The liquid crystal fluid may be hazardous to your health or fatal. If the liquid crystal fluid from the LCD contacts your body or clothing, wash it off with soap immediately.

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## CMN86 INSTALLATION

### Preparation

**Please read and understand entire manual before installation.**

*Consult a qualified technician for detailed instructions or installation assistance.*

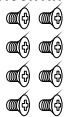
### Before You Start

- Disconnect negative battery terminal.
- Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight, or where it would be subject to dust, dirt or excessive vibration.

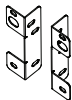
### Getting Started

- Unpack unit from its protective packaging.
- Connect vehicle wiring harness and antenna to this receivers harness. See wiring instructions. Consult a qualified technician if you are unsure.
- Certain vehicles may require an installation dash kit and/or wiring harness adapter (sold separately).
- Reconnect battery negative terminal.
- Test for correct operation and secure back into dashboard.
- Snap trim ring into place if needed.

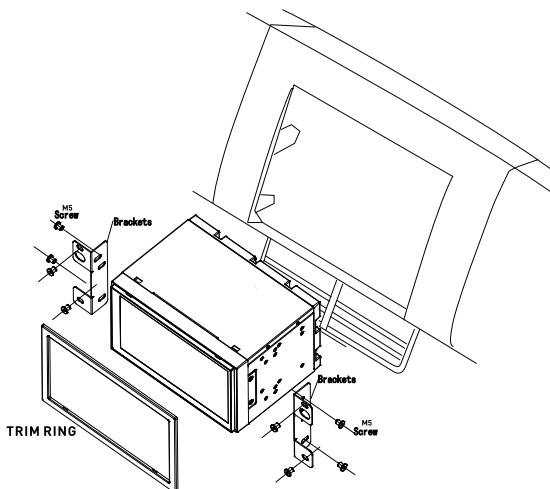
MOUNTING SCREWS      MOUNTING BRACKET



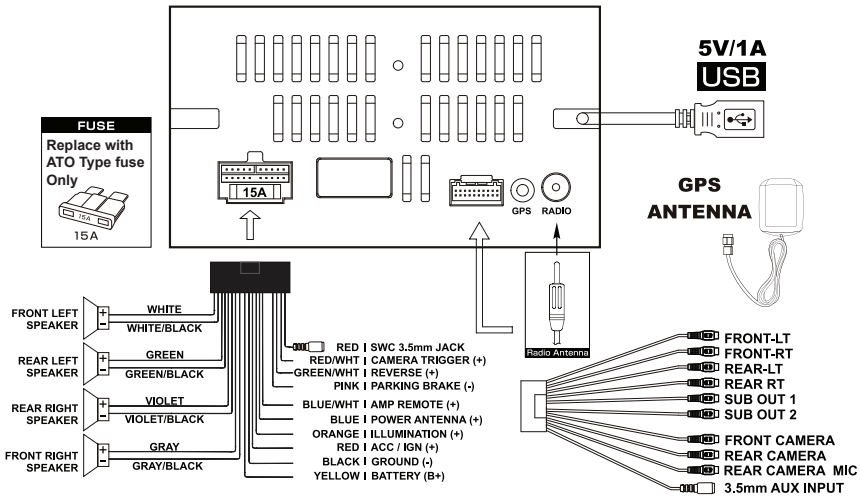
M5.0 x 6.0mm



### Tools Required



### Input / Output Wiring Diagram



#### Tips

When replacing a fuse, make sure to use the correct type and amperage. Using an incorrect fuse could cause damage. The unit uses (1) 15 amp ATO blade-type fuse located on the back of the unit.

#### Wiring Notes:

##### Front / Rear camera inputs

Up to two cameras (not included) can be used.

We recommend optional Jensen Backup Camera part BUCAM200J for Front Camera and part BUCAM300AJ or BUCAM400AJ for the Rear Camera.

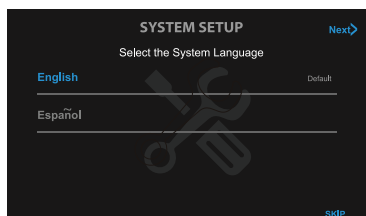
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## CMN86 OPERATION

### Getting Started - First Time Setup Wizard

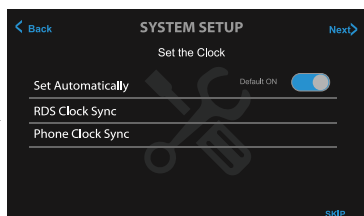
The first time the unit is powered on, the Setup Wizard will guide you through the main system settings and connect to your Bluetooth device.

#### STEP 1



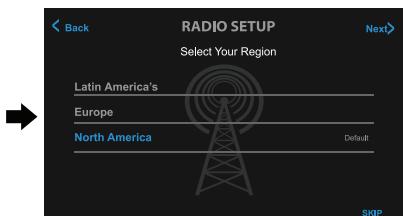
Select Language

#### STEP 2



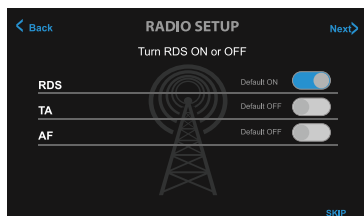
Set the Clock

#### STEP 3



Set Radio Region

#### STEP 4



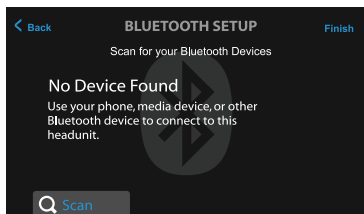
Set RDS Functions

#### STEP 5



Auto Store Presets

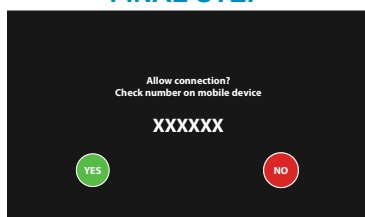
#### STEP 6



Pair Bluetooth

#### FINAL STEP

A random Bluetooth passcode will be generated. Follow the on-screen instructions, and press OK on your device.



Confirm PASSCODE



Tips

The Setup Wizard can be skipped at any time. To rerun the Wizard again, press RESET with a paperclip for 3 seconds.

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## CMN86 OPERATION

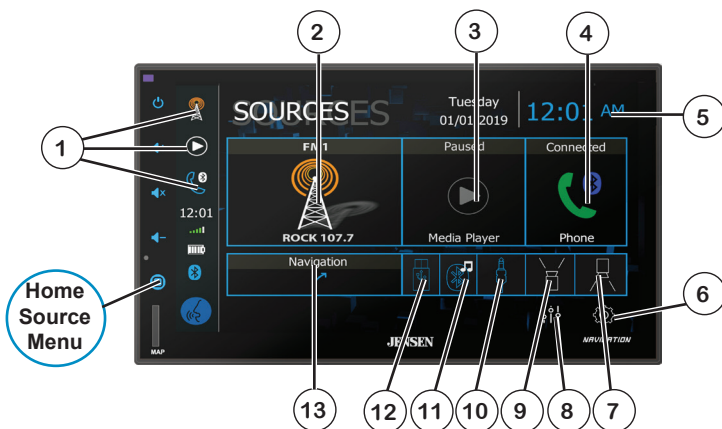
### Main Control Locations



- 1. Power / Last Source Mode
- 2. Volume Up
- 3. Mute
- 4. Volume Down
- 5. HOME

- 6. micro SD Map Port (not for Media)
- 7. BT Microphone
- 8. Reset
- 9. Touch Screen Display

### Source Menu Operation

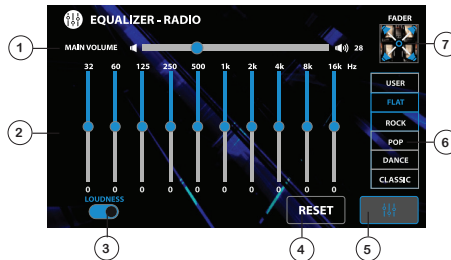


<b>Quick Select Sources</b> ①	<b>Press to quickly access your Top 3 Sources.</b>
<b>Radio</b> ②	<b>Press to access Radio.</b>
<b>Media Player</b> ③	<b>Press to access Media Player.</b>
<b>Bluetooth</b> ④	<b>Press to access Bluetooth.</b>
<b>Full Screen Clock</b> ⑤	<b>Press the clock to put the unit in Standby mode. Press anywhere on the screen to return to the previous mode.</b>
<b>Settings Menu</b> ⑥	<b>Press to access the System Setup Menu.</b>
<b>Rear Camera</b> ⑦	<b>Press to display the rear camera.</b>
<b>Audio</b> ⑧	<b>Press to display and adjust audio settings.</b>
<b>Front Camera</b> ⑨	<b>Press to display the front camera.</b>
<b>Auxiliary AV Input</b> ⑩	<b>Press to access files on auxiliary input device.</b>
<b>BT Music</b> ⑪	<b>Press to access the Bluetooth media player.</b>
<b>USB Media Port</b> ⑫	<b>Press to access files on USB device.</b>
<b>Navigation</b> ⑬	<b>Press to access Navigation.</b>



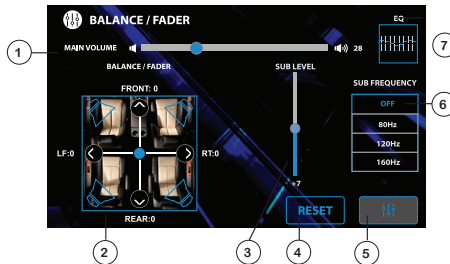
**Audio** Press **AUDIO** to display and adjust the following audio settings.

**Equalizer** Adjust the EQ screen to select EQ settings for the current source. The unit has source tone memory, meaning that it will remember the selected EQ settings for each source.



1. Adjust the volume level for the current source.
2. Displays the EQ Settings for the current source.
3. Turns the Loudness function on or off.
4. Press to reset to the default audio settings.
5. Press to return to the source screen.
6. Select a preset EQ, or select User for custom settings.
7. Press to display and adjust Balance / Fader screen.

**Balance / Fader** Adjust the Balance / Fader screen to select Balance, Fader and Subwoofer settings. These controls do not have source tone memory.



1. Adjust the volume level of the unit.
2. Adjust the fader and balance settings to distribute audio as desired front to back and left to right.
3. Adjust the subwoofer level.
4. Press to reset balance, fader and subwoofer to default settings.
5. Press to return to the source screen.
6. Return to EQ control screens.

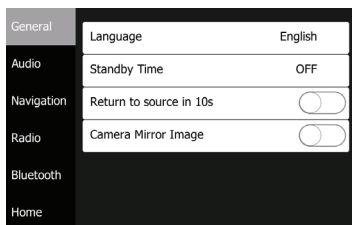
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## CMN86 OPERATION

### Settings Menu

From the Main Menu, press the gear icon to access the Setup menu and adjust the following: General, Audio, Navigation, Radio and Bluetooth.

Swipe up for  
more settings



#### General:

- **Language** - Select English or Spanish.
- **Standby Time** - Select the desired time for the unit to wait before entering standby mode, or select OFF to turn off standby mode.
- **Return to Sources in 10s** - Enable or disable this feature to determine whether or not the unit returns to the source screen after 10 seconds of no adjustment.
- **Rear Camera Mirror Image** - Enable or disable mirror imaging for the rear camera.
- **Front Camera Mirror Image** - Enable or disable mirror imaging for the rear camera.

#### Audio:

- **Key beep** - Enable or disable this feature.
- **Source Level** - Select preset audio levels for the following modes: Radio, Video, Music, Navigation, Bluetooth and Auxiliary Input.

#### Navigation:

- **Navi Voice Mix** - Enable or disable this feature.
- **Navigation Path Set**

#### Radio:

- **Radio Region** - Select desired region (America, Europe or Latin).
- **Traffic Announcements** - Enable or disable this feature.
- **Alternate Frequencies** - Enable or disable this feature.

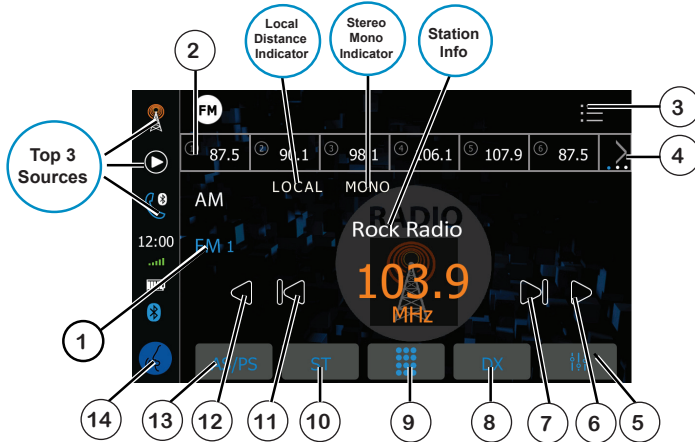
#### Bluetooth:

- **Bluetooth** - Turn Bluetooth signal on or off.
- **Auto Connect** - Turn auto connect feature on or off.
- **Auto Answer** - Turn auto answer feature on or off.

#### Time and Date:

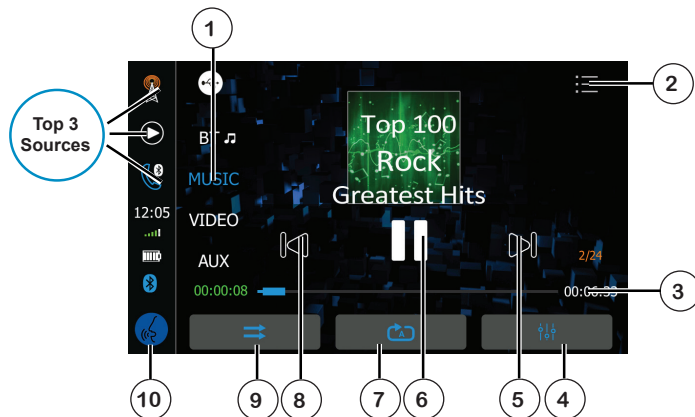
- **Time** - Press to set the time.
- **Date** - Press to set the date.
- **Time Zone** - Press to select time zone.
- **Daylight Savings Time** - Press to turn Daylight

### AM/FM Tuner Operation



- |                       |  |
|-----------------------|--|
| Band Selector ①       | Press to select between two AM and three FM bands.   |
| Preset Stations ②     | Press any preset station stored in the current band to tune radio to saved frequency. To save presets, tune the radio to desired station, then press and hold the desired preset button to save the station. |
| Additional Options ③  | Press to display and adjust Radio settings.  |
| Additional Presets ④  | Press to step through and select any of the preset stations in the additional bands.   |
| Audio ⑤               | Press to access and adjust audio settings.   |
| Manually Tune Up ⑥    | Press to tune to a higher frequency one step at a time.  |
| Seek Tune Up ⑦        | Press to automatically tune to the next strong station.  |
| Local   Distance ⑧    | Press to toggle between local and distance tuning.   |
| Direct Tuning ⑨       | Press to enter the desired station using a keypad.   |
| Stereo   Mono ⑩       | Press to toggle between Stereo and Mono tuning.  |
| Seek Tune Down ⑪      | Press to automatically tune to the last strong station.  |
| Manurally Tune Down ⑫ | Press to tune to a lower frequency one step at a time.   |
| AS   PS ⑬             | Press to scan presets and listen to the first 10 seconds of each. Press again to stop scanning and listen to the station. Press and hold to automatically find and store the strongest stations as presets,  |
| Voice Control ⑭       | Press to activate the voice control feature.   |

### Media Player Operation



- Source Selector (1)** Press desired option to select between audio sources for the media player: Bluetooth Music, Music (USB), Video (USB) or Auxiliary Input.
- File/Folder List (2)** Press to display all files/folders on the device by Song Title, Artist, Album or Playlist. Press any file to begin playback.  
**Note:** File/folder list is only available for USB playback.
- Elapsed Time (3)** Displays the total and elapsed time for the current file.
- Audio (4)** Press to access and adjust audio settings.
- Tune/Track Up (5)** Press to advance to the next track. Press and hold to fast forward through the current track.
- Play/Pause (6)** Press to pause or resume playback.
- Repeat (7)** Press to step through the following repeat options: Repeat 1, Repeat All or Repeat Off.  
**Note:** Repeat feature is for USB playback only.
- Tune/Track Down (8)** Press to return to the previous track. Press and hold to fast reverse through the current track.
- Random (9)** Press to play all tracks in random order. Press again to resume normal playback.  
**Note:** Random feature is for USB playback only.
- Voice Control (10)** Press to activate the voice control feature.

### Media Compatibility

File Type			MP3
File System	FAT	FAT 12	X
		FAT 16/FAT 32	✓
File Extension	.mp3/.MP3/.Mp3/.mP3		✓
	.rmp/.m4a		X
MPEG Format	MPEG 1		✓
	MPEG 2		✓
	MPEG 2.5		✓
Sampling Frequency	MPEG 1		32/44.1/48kHz
	MPEG 2		12/16/22.05/24kHz
	MPEG 2.5		8/11.025/12kHz
Bitrate	MPEG 1		32 ~ 320kbps
	MPEG 2		8 ~ 160kbps
	MPEG 2.5		8 ~ 160kbps
Other Information	Directory Depth		Unlimited
	File Name Length		32 bytes
	Total File Number		2000 files
	Total Folder Number		200 folders
	File Number via Folder		2000 files
	MP3 ID3 TAG	ver.1.x	✓
		ver.2.x	✓
		Title, Artist, Album	✓

#### Notes:

- For USB mode, it is not possible to view JPG files on the in-dash monitor while the vehicle is moving. This is a safety feature to prevent driver distraction.
- The JPG image viewer function will only operate when vehicle is in park and the parking brake is engaged.

#### Media Compatibility

The following types of files are not compatible:

- MP3 PRO format, MP3 playlists
- RMP format
- WAV format
- WMV format
- AAC, protected AAC, M4A format

#### Playback Order

MP3 playback sequence begins in the root folder of the USB drive. Any folders that do not include MP3/JPG files are skipped.

#### Compatible Recording Formats

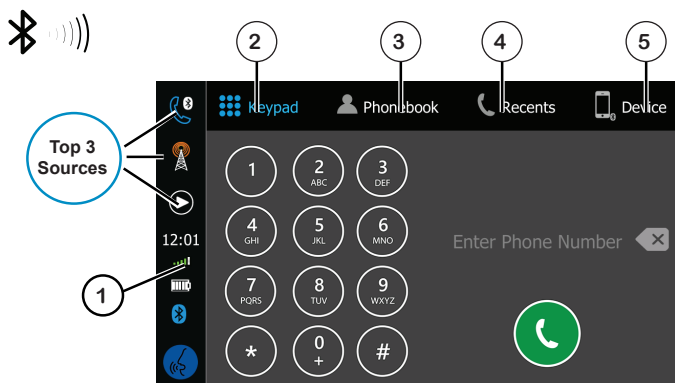
ISO9660 standards:

- Maximum nested folder depth is 8 (including the root folder).
- Valid characters for folder/file names are letters A-Z (all caps), numbers 0-9, and “\_” (underscore). Some characters may not be displayed correctly, depending on the character type.

#### Notes

Some files may not play, depending on sampling rates and bit rates. For best results, use the following settings when ripping MP3 files: 128kbps or higher constant bit rate; 44.1kHz or higher sampling frequency.

### Bluetooth - Handsfree Operation



#### Preparation

Before you can use a Bluetooth device, it must be paired and connected. Make sure that Bluetooth is activated on your device before you begin the pairing process.

#### Pairing a New Device

The unit broadcasts the pairing signal constantly when no devices are currently connected. Complete the pairing sequence from your Bluetooth device. Refer to the owner's manual for your device for more details. The device name is "JENSENBT". The unit can be in any mode of operation when pairing is performed. On certain phones, pairing may need to be done more than once.

#### Connecting a Paired Device

Most Bluetooth devices support the auto-connect feature and will connect automatically if the device is in range when the unit is powered-on. If your device was previously paired but does not connect, enter the Bluetooth setup menu and turn Auto Connect on.

#### Bluetooth Phone

To access the phone, select Bluetooth Phone from the Main Menu or from any operational mode.

#### Signal Strength ①

Displays the strength of the current signal.

#### Keypad ②

Press to display the keypad.

#### Phonebook ③

Press to display stored contacts. Press any contact to dial that number.

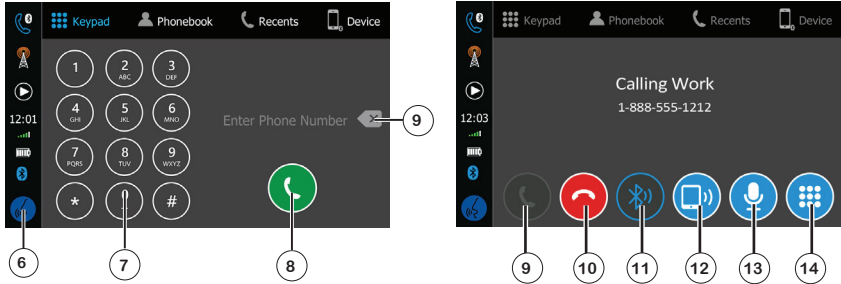
#### Recent Calls ④

Press to display a list of recent calls. Press any number to dial.

#### Device Manager ⑤

Press to display a list of paired devices, and select desired device to connect.

***Bluetooth - Handsfree Operation***

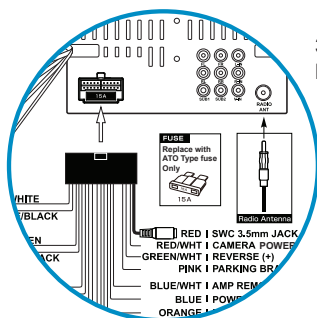


- |                          |   |
|--------------------------|---|
| <b>Voice Control</b> ⑥   | <b>Press to activate the voice control feature.</b>   |
| <b>Keypad</b> ⑦          | <b>Use the keypad to dial a number.</b>               |
| <b>Talk</b> ⑧            | <b>Press to connect a call to the number entered.</b> |
| <b>Backspace</b> ⑨       | <b>Press to backspace when using the keypad.</b>      |
| <b>Talk</b> ⑩            | <b>Press to connect a call.</b>                       |
| <b>End Call</b> ⑪        | <b>Press to end a call.</b>                           |
| <b>Bluetooth Audio</b> ⑫ | <b>Transfer audio to the device.</b>                  |
| <b>Device Audio</b> ⑬    | <b>Transfer audio to the phone.</b>                   |
| <b>Mute</b> ⑭            | <b>Press to mute call audio.</b>                      |
| <b>Display Keypad</b> ⑮  | <b>Press to return to the keypad.</b>                 |

### Steering Wheel Controls

A third-party adapter must be used in order for the CMN8620 to be compatible with any OEM steering wheel controls.

The CMN8620 has a built-in 3.5mm SWC interface that compatible with many popular 3rd party SWC control modules, such as PAC, METRA, and others.



3.5mm SWC port located on the rear of the unit, on the MAIN POWER I/O Harness

The following controls are available for most vehicles.

Volume +  
Volume -  
Mute  
Seek / Track +  
Seek / Track -  
Band  
Mode  
BT Talk  
BT End Call

**Note:** Not all OE steering wheel functions may be supported by the CMN8620

We recommend the PAC SWI-RC .

1. Set "Radio Select Switch". Set the SWI-RC to position 7 - "Pioneer/Other/Sony".
2. To program, use the Pioneer/Sony/Other radio function mapping order.
3. When programming the SWI-RC, if a function is not supported (or not desired), then the function **MUST** be skipped as per the PAC SWI-RC instructions.
4. The SWC function **MUST** be programmed in the correct order per the PAC SWI-RC radio function mapping order instructions.



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***Cameras & Auxiliary Input***

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**Rear Camera**

Connect an optional rear camera to the Rear Camera inputs (Yellow RCA connector for video and Black RCA connector for audio). Refer to the wiring diagram for details.

**Manual selection** - Touch the REAR CAMERA icon from the Main Menu or from any operational mode (when enabled) to select camera mode. Touch the top left area on the screen to exit camera mode.

**Note:** The manual mode is for dedicated cameras that are ALWAYS on while driving, it is not meant for cameras that are connected to the vehicle's reverse light.

The unit will automatically select camera mode when connected to the reverse lamp circuitry.

**Note:** The external video output is not active when using the rear camera input.

**Front Camera**

Connect an optional front camera to the Front Camera inputs (Yellow RCA connector for video; there is no audio connection for a front camera. Refer to the wiring diagram for details.

**Auxiliary Input**

Connect an optional audio source into the rear RCA input.

Select AUX IN from the Main Menu to listen to audio.

Adjust volume on the external audio source as needed (if connected to the headphone output of the device).

### Troubleshooting

General		
PROBLEM	CAUSE	ACTION
Unit will not turn on (no power)	Red and/or Yellow wire not connected or incorrect voltage	Check connections for proper voltage (11~16VDC)
	Black wire not connected	Check ground connection
	Blown fuse on unit or vehicle	Replace fuse(s)
Unit has power (but no sound)	Speaker wires not connected	Check all connections, including speakers
	Speakers are blown	Replace speakers
	One or more speaker wires touching each other or touching chassis ground	Insulate all bare speaker wires from each other and chassis ground
Unit blows fuse(s)	Yellow or red wire touching chassis ground	Check for pinched or shorted wires
	Speaker wires touching chassis ground	Check for pinched or shorted wires
	Incorrect fuse rating	Use fuse with correct rating
Unit has audio (but no video)	Parking brake safety circuit not connected Parking brake not applied	Check connections at parking brake Apply parking brake as described in manual
	Video Playback Codec is not supported	See Media Codec Support section

## Customer Support

**1-888-921-4088**

(Monday-Friday, 9AM-5PM EST)

Visit <https://www.jensenmobile.com>

#### For Your Records

Please keep your original sales receipt and be prepared to provide this receipt in the event you require service, as your original receipt is considered the best proof of purchase and indicates the date you purchased your JENSEN product.

#### Dealer Info

Dealer Name: \_\_\_\_\_

Dealer Phone: \_\_\_\_\_

Purchase Date: \_\_\_\_\_

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***Limited One Year Warranty***

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This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

Namsung America Inc. warrants this product to the original purchaser to be free from defects in material and workmanship for a period of one year from the date of the original purchase.

Namsung America Inc. agrees, at our option, during the warranty period, to repair any defect in material or workmanship or to furnish an equal new, renewed or comparable product (whichever is deemed necessary) in exchange without charges, subject to verification of the defect or malfunction and proof of the date of purchase. Subsequent replacement products are warranted for the balance of the original warranty period.

**Who is covered?**

This warranty is extended to the original retail purchaser for products purchased from an authorized Dual dealer and used in the U.S.A.

**What is covered?**

This warranty covers all defects in material and workmanship in this product. The following are not covered: software, installation/removal costs, damage resulting from accident, misuse, abuse, neglect, product modification, improper installation, incorrect line voltage, unauthorized repair or failure to follow instructions supplied with the product, or damage occurring during return shipment of the product. Specific license conditions and copyright notices for the software can be found via [www.jensenmobile.com](http://www.jensenmobile.com)

**What to do?**

1. Before you call for service, check the troubleshooting guide in your owner's manual. A slight adjustment of any custom controls may save you a service call.
2. If you require service during the warranty period, you must carefully pack the product (preferably in the original package) and ship it by prepaid transportation with a copy of the original receipt from the retailer to an authorized service center.
3. Please describe your problem in writing and include your name, a return UPS shipping address (P.O. Box not acceptable), and a daytime phone number with your shipment.
4. For more information and for the location of the nearest authorized service center please contact us by one of the following methods:

- Call us toll-free at 1-888-921-4088
- E-mail us at [cs@dualav.com](mailto:cs@dualav.com)

**Exclusion of Certain Damages:** This warranty is exclusive and in lieu of any and all other warranties, expressed or implied, including without limitation the implied warranties of merchantability and fitness for a particular purpose and any obligation, liability, right, claim or remedy in contract or tort, whether or not arising from the company's negligence, actual or imputed. No person or representative is authorized to assume for the company any other liability in connection with the sale of this product. In no event shall the company be liable for indirect, incidental or consequential damages.

### Specifications

#### FM Tuner

US Tuning Range:	87.5MHz-107.9MHz
EU Tuning Range:	87.50MHz-108.00MHz
Usable Sensitivity:	8.5dBf
50dB Quieting Sensitivity:	10dBf
Stereo Separation@ 1kHz:	30dB
Frequency Response:	30Hz-13kHz

#### AM Tuner

Tuning Range:	530kHz-1710kHz
Usable Sensitivity:	<42dBu
Frequency Response:	30Hz-2.2kHz

#### Bluetooth

Version:	4.1 + EDR
Profiles:	HFP / A2DP / PBAP
Range:	Up to 33ft / 10m

#### Monitor

Brightness:	500 nit
TFT Resolution:	1024x600
TFT Backlighting:	LED
Touch Screen Type:	Capacitive

#### General Specifications

Operation Voltage Input:	11~16VDC
USB 1 Charge Output:	1.5A
USB 2 Charge Output:	1.0A
Speaker Nominal Impedance:	4~8 ohms
Line Output Voltage:	4 Volts RMS
Dimensions:	5" x 7" x 4" (126D x 178W x 101H mm)

Design and specifications subject to change without notice.



#### CEA-2006 Power Standard Specifications

(reference: 14.4VDC +/- 0.2V, 20Hz~20kHz)

Power Output: 16 Watts RMS x 4 channels at 4 ohms and  $\leq 1\%$  THD+N  
Signal to Noise Ratio: 80dBA (reference: 1 watt into 4 ohms)



# CMN86

## INSTALLATION & OWNER'S MANUAL



### Customer Support

**1-888-921-4088**

(Monday-Friday, 9AM-5PM EST)

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